

**Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services**

STATEMENT OF BASIS

BASF Catalyst, LLC
BASF Catalyst, LLC - Port Allen Works
Port Allen, West Baton Rouge Parish, Louisiana
Agency Interest Number: 9495
Activity Number: PER20080001
Proposed Permit Number: 3120-00044-V3

I. APPLICANT

Company:
BASF Catalyst, LLC
3502 S Riverview Drive
Port Allen, Louisiana 70767

Facility:
BASF Catalyst LLC - Port Allen Works
3502 S Riverview Drive
Port Allen, West Baton Rouge Parish, Louisiana
Latitude: 30° 29' 49" 13 Longitude: 91° 13' 35" 34

II. FACILITY AND CURRENT PERMIT STATUS

Primary operations at BASF Catalyst, LLC's Port Allen Works facility involve manufacturing and processing of alumina catalyst supports for industry. Other operations include the manufacture and processing of other specialty inorganic oxides including silica, titanium, and magnesium oxides. The principal processing involves thermal treatment of the oxide feeds under controlled temperature and moisture levels.

The Port Allen Works facility currently operates under Permit No. 3120-00044-V2, issued August 15, 2008.

III. PROPOSED PROJECT/PERMIT INFORMATION

Application

A permit application and Emission Inventory Questionnaire were submitted by BASF Catalyst, LLC dated March 7, 2008 requesting a Part 70 operating permit modification.

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Project

Port Allen Works operates four (4) ball activators: BA-101, BA-102, BA-103 and BA-104. Currently, only BA-102 (EQT 007) is permitted to be operated using products containing acetic acid. When activated, acetic acid is released as volatile organic compounds (VOC). This permit modification application proposes a cap for VOC emissions from activating acetic acid containing product for all four ball activators.

Proposed Permit

Permit 3120-00044-V3 will be the Part 70 operating permit modification of Part 70 operating permit 3120-00044-V2 for the Port Allen Works facility.

Permitted Air Emissions

Estimated emissions in tons per year are as follows:

Pollutant	Before	After	Change
PM ₁₀	66.67	66.67	-
SO ₂	0.32	0.32	-
NO _x	74.03	74.03	-
CO	44.74	44.74	-
VOC	78.05	75.64	- 2.41

LAC 33:III Chapter 51 Non-VOC Toxic Air Pollutants (TAPs):

Pollutant	Before	After	Change
Ammonia	0.340	0.340	-
Barium Compounds	1.100	1.044	-0.056
Cadmium Compounds	0.160	0.102	-0.058
Cobalt Compounds	0.610	0.558	-0.052
Copper Compounds	0.780	0.748	-0.032
Manganese Compounds	0.340	0.292	-0.048
Nickel Compounds	0.450	0.433	-0.017
Zinc Compounds	0.160	0.102	-0.058
Total	3.940	3.619	-0.321

Other VOC (TPY): 75.64

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IV REGULATORY ANALYSIS

The applicability and exemptions of the appropriate regulations are straightforward and provided in the Specific Requirements section, and Section X Table 1 and Section XI Table 2 of the proposed permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are also provided in the Specific Requirements section of the proposed permit.

Prevention of Significant Deterioration/Nonattainment Review

This permit was reviewed for compliance with 40 CFR 70, the Louisiana Air Quality Regulations, and New Source Performance Standards (NSPS). Prevention of Significant Deterioration (PSD), Nonattainment New Source Review (NNSR), and NESHAP do not apply.

MACT Requirements

The facility is a minor source of TAPs/HAPs. There are no MACT requirements.

Air Quality Analysis

Emissions associated with the proposed modification were reviewed by the Air Quality Assessment Division to ensure compliance with the NAAQS and AAS. LDEQ did not require the applicant to model emissions.

General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to the Section VIII – General Condition XVII Activities of the proposed permit.

Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to the Section IX – Insignificant Activities of the proposed permit.

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V. PERMIT SHIELD

A permit shield Per 40 CFR 60.6(f) and LAC 33:III.507.I has not been requested and is not included in the proposed permit.

VI. PERIODIC MONITORING

The Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are straightforward and provided in the Specific Requirements section of the permit.

VII. GLOSSARY

Carbon Monoxide (CO) – A colorless, odorless gas, which is an oxide of carbon.

Maximum Achievable Control Technology (MACT) – The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

Hydrogen Sulfide (H₂S) – A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the reaction of acids on metallic sulfides, and is an important chemical reagent.

New Source Review (NSR) – A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C (“Prevention of Significant Deterioration of Air Quality”) and D (“Nonattainment New Source Review”).

Nitrogen Oxides (NO_x) – Compounds whose molecules consist of nitrogen and oxygen.

Organic Compound – Any compound of carbon and another element. Examples: Methane (CH₄), Ethane (C₂H₆), Carbon Disulfide (CS₂)

Part 70 Operating Permit – Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥ 10 tons per year of any toxic air pollutant; ≥ 25 tons of total toxic air pollutants; and ≥ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

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PM₁₀ – Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) – The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO₂) – An oxide of sulfur.

Sulfuric Acid (H₂SO₄) – A highly corrosive, dense oily liquid. It is a regulated toxic air pollutant under LAC 33:III. Chapter 51.

Title V Permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) – Any organic compound, which participates in atmospheric photochemical reactions; that is, any organic compound other than those, which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.